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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,833	04/16/2004	Douglas Brisbin	NSC1-H1400 [P05941]	9453

7590 05/31/2006
GIRARD & EQUITZ LLP
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EXAMINER

DICKEY, THOMAS L

ART UNIT	PAPER NUMBER
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2826

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/825,833

Applicant(s)

BRISBIN ET AL.

Examiner

Thomas L. Dickey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32 and 33 is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/08/2006 has been entered.

Drawings

2. The drawings, including the proposed drawing correction and/or the proposed substitute sheets of drawings filed on 01/11/2006, are acceptable to the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 stand rejected under 35 U.S.C. 102(b) as being anticipated by KWON ET AL. (5,306,652).

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Kwon et al. discloses a high voltage power transistor PMOS (note that although Kwon's figure shows an NMOS Kwon et al. explicitly disclose, column 4 lines 53-54, both PMOS and NMOS devices) device having a drain junction breakdown point and a maximum impact ionization point, and including a gate 32; a body 12; and an extended drain region 14-24-36 formed (note column 2 lines 61-63) in the body 12, wherein the extended drain region 14-24-36 includes a drain 36, a deep drain implant 14, and a lightly doped drain implant 24 between part of the deep drain implant 14 and the gate 32, at least a portion of the lightly doped drain implant 24 is located between the drain 36 and the gate 32, and at least a portion of the deep drain implant 14 is located below the drain, 36 wherein (note column 4 lines 19-21) the drain junction breakdown point is located within at least one of the body 12 and the extended drain region 14-24-36. Note figure 4, column 2 lines 43,44, and 61-63, and column 4 lines 19-21 and 53-54.

The applicant's claims 1-10 do not distinguish over the Kwon et al. reference regardless of the functions allegedly performed by the claimed device, because only the device per se is relevant, not the recited functions of reducing any drain breakdown voltage walk-in exhibited by the device below a predetermined value (recited in claims 1,6,9, and 10), or causing the device to exhibit no significant drain breakdown voltage walk-in (recited in claims 2,3, and 5, with "no significant drain breakdown voltage walk-in" limited to 2 volts absolute magnitude in claim 3). Kwon et al. disclose that the drain junction breakdown point of their device is located in its body, which is the same place Applicants locate the drain junction breakdown point of their device. All the other

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components of Applicants invention are also found in the Kwon et al. disclosure. It is reasonable to assume that the Kwon et al. device, being structurally the same as applicants' device, is at least capable of performing the same functions Applicants have discovered their device is capable of.

Note that functional language in a device claim is directed to the device per se, no matter which of the device's functions is referred to in the claim. See *In re Ludtke and Sloan*, 169 USPQ 563, 567 (CCPA, 1971), and *In re Swinehart* 169 USPQ 226, 229 (CCPA, 1971), both of which make it clear that it is the patentability of the device per se which must be determined in a "functional language" claim and not the patentability of the function, and that an old or obvious device alleged to perform a new function is not patentable as a device, whether claimed in "functional language" claims or not. Note that applicant has the burden of proof in such cases, as the above caselaw makes clear. The Swinehart court stated the law as follows:

[I]t is elementary that the mere recitation of a newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to those things to distinguish over the prior art. Additionally, where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

Id at 229. See also MPEP §§ 2112.01 and 2114, and the cases cited there.

Furthermore, the applicant's claims 6-8 do not distinguish over the Kwon et al. reference regardless of the processes used to form the device, because only the final product is relevant, not the recited process of manufacturing the device in accordance with a BiCMOS process, or the recited process of controlling an implant dose employed

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to produce the lightly doped drain implant 24 so that the implanting dose is much less than 2.23×10^{12} ions/cm², and at least substantially equal to 1.15×10^{12} ions/cm².

Note that a "product by process" claim is directed to the product per se, no matter how actually made. In re Hirao, 190 USPQ 15 at 17 (footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Fessmann, 180 USPQ 324; In re Avery, 186 USPQ 161; In re Wertheim, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); and In re Marosi et al., 218 USPQ 289, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that applicant has the burden of proof in such cases, as the above caselaw makes clear. See also MPEP 706.03(e).

Allowable Subject Matter

4. Claims 32 and 33 are allowed. Note the contrast between claim 32, claiming the drain breakdown point to be under the lightly doped drain implant (corresponding in Kwon et al. to part 24) and Kwon et al.'s disclosing said drain breakdown point to be to be under Kwon et al.'s drain 36.

Response to Arguments

5. Applicant's arguments filed 5/8/06 have been fully considered but they are not persuasive.

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It is argued, at page 7 of the remarks, that "The explicit limitation in claim 1 that at least one of the recited drain junction breakdown point and maximum impact ionization point is located so as to reduce any drain breakdown voltage walk-in exhibited by the device below a predetermined value (i.e., is located in such a position that any drain breakdown voltage walk-in exhibited by the device has a magnitude below a predetermined value) is a structural limitation of the claimed device." Interesting, this is virtually identical to the argument raised by appellants in *In re Ludtke and Sloan*¹. The court replied,

We agree with the Patent Office that the spatial separation between the panels is recited in functional language; however, as we said recently in *In re Swinehart*, 58 CCPA —, — F.2d —, 169 USPQ 226 (1971), there is nothing intrinsically wrong with the use of such claim language. The rationale behind the Patent Office's objection to functional language, which rationale seems particularly applicable here, was discussed in *Swinehart* where this court stated: * * * [I]t is elementary that the mere recitation of a newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to those things to distinguish over the prior art. Additionally, where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

This is exactly what the examiner did here. It was the examiner's view that the parachute canopy of Menget possessed all the claimed characteristics, including the capability of sequential opening, of appellants' canopy. Therefore, he challenged appellants to show that Menget's canopy did not inherently possess these characteristics.... Thus, since the only alleged distinction between claims 1-6 and Menget is recited in functional language, it was incumbent upon appellants, when challenged, to

¹ "Appellants strenuously contend that the claim language in question (for example, from 'such that the critical' through 'gradually deaccelerate' in claim 1, *supra*) is not functional, that a claim recitation of a dimensional limitation and an operational characteristic to achieve a desired result is a positive limitation, and that this limitation distinguishes the claims from Menget since Menget does not teach successive opening of panels by selective variation of the spatial distances between the panels." *In re Ludtke and Sloan*, 169 USPQ 563 at 566.

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show that the canopy disclosed by Menget does not actually possess such characteristics. This they have failed to do.

In re Ludtke and Sloan, 169 USPQ 563 at 566-567 (CCPA 1971) (internal quotations omitted). See also *In re Spada*, 15 USPQ2d 1655 (Fed. Cir. 1990).

It is argued, at page 8 of the remarks, that "Kwan [sic] fails to discuss the phenomenon of drain breakdown voltage walk-in, and neither teaches nor suggests that any device disclosed therein could or should be implemented so that its drain junction breakdown point or maximum impact ionization point is located so as to reduce any drain breakdown voltage walk-in exhibited by the device below a predetermined value." This statement brings to mind the traverse ("Schreiber argues, however, that Harz does not disclose that such a structure can be used to dispense popcorn from an open-ended popcorn container") put forth by the *In re Schreiber* appellant. The Federal Circuit replied:

Although Schreiber is correct that Harz does not address the use of the disclosed structure to dispense popcorn, the absence of a disclosure relating to function does not defeat the Board's finding of anticipation. It is well settled that the recitation of a new intended use for an old product does not make a claim to that old product patentable. See *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990) ("The discovery of a new property or use of a previously known composition, even when that property and use are unobvious from prior art, cannot impart patentability to claims to the known composition."); *Titanium Metals Corp. of Am. v. Banner*, 778 F.2d 775, 782, 227 USPQ 773, 778 (Fed. Cir. 1985) (composition claim reciting a newly discovered property of an old alloy did not satisfy section 102 because the alloy itself was not new); *In re Pearson*, 494 F.2d 1399, 1403, 181 USPQ 641, 644 (CCPA 1974) (intended use of an old composition does not render composition claim patentable); *In re Zierden*, 411 F.2d 1325, 1328, 162 USPQ 102, 104 (CCPA 1969) ("[M]ere statement of a new use for an otherwise old or obvious composition cannot render a claim to the composition patentable."); *In re Sinex*, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962) (statement of intended use in an apparatus claim failed to distinguish over the prior art apparatus); *In re Hack*, 245 F.2d 246, 248, 114 USPQ 161, 162 (CCPA 1957) ("the grant of a patent on a composition or a machine cannot be predicated on a new use of that machine or composition"); *In re Benner*, 174 F.2d 938, 942, 82 USPQ 49, 53 (CCPA 1949) ("no provision has been made in the patent statutes for granting a patent upon an old product based solely upon discovery of a new use for such product"). Accordingly, Schreiber's contention that his structure will be used to dispense popcorn does not have patentable weight if the structure is already known, regardless of whether it has ever been used in any way in connection with popcorn.

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In re Schreiber, 44 USPQ2d 1429, 1431 (Fed. Cir, 1997)

It is argued, at page 8 of the remarks, that “Nor is there any basis determinable from Kwan [sic] in support of the position that any device disclosed in Kwan [sic] is inherently implemented so that its drain junction breakdown point or maximum impact ionization point is located so as to reduce any drain breakdown voltage walk-in exhibited by the device below a predetermined value.” However, there is at least a reasonable basis for believing that the device disclosed by Kwon et al. is inherently capable of reducing drain breakdown voltage walk-in exhibited below a predetermined value, namely, the fact that Kwon et al.’s device is structurally identical to the invention described by Applicants.

See *In re Spada*, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990), (prior art polymers anticipated claimed polymers despite the fact that claims recited “tackiness” while prior art reference described the polymers as “hard and abrasion resistant”), MPEP § 2112 (part III) (a rejection under 35 U.S.C. § 102/103 can be made when the prior art product seems to be identical except that the prior art is silent as to an inherent characteristic), and MPEP § 2112.01 (when the structure recited in the reference is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent).

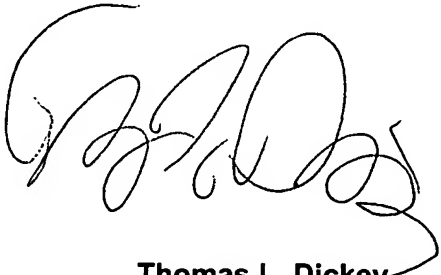
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Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas L. Dickey whose telephone number is 571-272-1913. The examiner can normally be reached on Monday-Thursday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas L. Dickey
Patent Examiner
Art Unit 2826
06/06